Procedure: *Estimating Checklist*	
Issue Date: May 5, 2000	Procedure ID: *S-PE-260*
Supersedes: April 4, 2000	Rev/Change 2.0

1. **Purpose:**   To identify items that should be considered when preparing estimates for a project. (To prevent the sin of omission.)

2. **Creating Procedures:**

   P-PE-160 - Estimating Required Quantities

3. **Contents:**

   This is a checklist of needed resources that should be considered when preparing the estimates for a project. This checklist is intended to prompt the developers to consider items or resources that they might otherwise overlook.

4. **Format:**

   Following Page

5. **Notes:**

   The checklist that follows was taken from the book "Managing a Programming Project" by Philip W. Metzger and John Boddie (pages 52-55).

Estimating Checklist

Project ID: _____
Prepared By: _____
Date: _____

Manpower:
___ Programming Manpower
    ___ Programmers
    ___ First-Level programming managers
    ___ Subcontractor Support
___ Support Personnel
    ___ Analysts
    ___ Designers
    ___ Testers
    ___ Managers
    ___ Engineers
    ___ Secretaries
    ___ Typists
    ___ Instructors
    ___ Computer Operators
    ___ Administrative Assistants
    ___ Financial Assistants
    ___ Librarians
    ___ Technical Writers
    ___ Clerical Assistants
    ___ Couriers
    ___ Consultants
    ___ Subcontractor

Equipment:
___ Computer time/access
    ___ Users
    ___ Operational Programmers
    ___ Support Programmers
    ___ Analyst and Designers
    ___ Management
    ___ Maintenance Personnel
___ Users
    ___ Compile and Build
    ___ Module Test
    ___ Integration Test
    ___ System Test
    ___ Acceptance Test
    ___ Site Test
    ___ Project Support Programs
        ___ Simulation
        ___ Report Generation
        ___ Project Management
        ___ Estimation
        ___ Program Maintenance
        ___ Hardware Maintenance
        ___ Training
        ___ Contingency Reserve

Estimating Checklist

Project ID:_____

Prepared By:_____

Date: _____

____ Configuration Needed
    ___ Target (customer) Computers
    ___ Support Computers

___ Other Equipment Cost
    ___ Office Support System
        ___ PCs and Workstations
        ___ LAN
        ___ Copiers
        ___ FAX
    ___ Communications (phones, etc.)
    ___ PCs and Workstations

___ Special changes to standard equipment
    ___ Remote Devices (notepads, etc.)

Miscellaneous:

___ Physical Facilities
    ___ General (office space, furniture, etc.)
    ___ Special for your project
        ___ Document Storage
        ___ Tape Storage
        ___ Disk Storage
        ___ Classified Storage
        ___ Program pickup and drop area
        ___ Off-site data archive
        ___ Copier equipment area

___ Supplies
    ___ General (paper, pencils, etc.)
    ___ Special for your project
        ___ Computer printer paper
        ___ Tapes
        ___ Disk packs/diskettes
        ___ Carrying Cases

___ Relocations
    ___ Moving People
    ___ Moving equipment and supplies

___ Trips
    ___ Reasons
        ___ For computer time
        ___ To customer
        ___ To other contractors/subcontractors
        ___ To professional meetings and symposiums
    ___ Number of trips
    ___ Number of people per trip
    ___ Duration

___ Special publications costs (work subcontracted to outside publications organizations)

Estimating Checklist

Project ID:_____
Prepared By:_____
Date: _____

___ Other
      ___ Purchased software
      ___ Leased software
      ___ Shift premium
      ___ Overtime payment
      ___ Per diem payment
      ___ Special training aids

Factors that should increase your estimate:
___ Vague job requirements
___ Innovation required, your team will be using a tool or technique for the first time
___ System will have more than one user
___ System will be installed at more than one location
___ System is real-time
___ System replaces a system that is used by multiple groups or locations
___ System consolidates functionality of multiple existing systems
___ Interfaces with other systems are ill-defined or complex
___ Your programs are to interface with other programs
___ You are to modify someone else's program
___ Your analyst have not worked on a similar application
___ Your designers have not worked on a similar application
___ Your programmers have not worked on a similar application
___ Your managers have not worked on a similar application
___ The system is larger than those you have usually worked on
___ You must share computer time with other projects
___ You do not have complete control of computer resources
___ System databases are very large
___ The existing data that will be used is of either poor or unknown quality
___ You are obliged to follow government configuration management standards
___ Your background is not in programming
___ Customer will supply data base
___ Customer will supply test data
___ Data base is complex or not yet defined
___ Data base is classified for security reasons
___ Access to computer is unpredictable
___ Your designers are not expert programmers
___ Your confidence in personnel continuity is low
___ You have little or no choice of personnel who work for you
___ The customer must sign off on your design
___ Other agencies must sign off on your design
___ Customer is inexperienced in data processing
___ Customer is very experienced in data processing
___ Customer is beset by internal political problems
___ Your company is beset by internal political problems
___ You expect much change during development (requirements, customer personnel)
___ The system has a large number of functions
___ The working environment promises many interruptions